

Title (en)

Apparatus for detecting trouble location in wire harnesses

Title (de)

Vorrichtung zur Fehlerortdetektion in Kabelbäumen

Title (fr)

Appareil pour détecter l'endroit d'un défaut dans un faisceau de câbles

Publication

EP 0784210 A2 19970716 (EN)

Application

EP 97300019 A 19970102

Priority

JP 233396 A 19960110

Abstract (en)

An apparatus for detecting a trouble location in a wire harness can easily detect a location of any trouble such as breakage or short circuit in electric wires in a wire harness and in particular can detect the trouble location by means of a simple structure utilizing a portion with a shield function. In the detecting apparatus, a pulse signal is transmitted in electric wires (2) in a wire harness (1), in which a trouble location is to be detected, and in a sensing line juxtaposed along the electric wires (2) at their ends. A measuring device (20) receives a reflected wave from a transmitted wave and measures a difference in time between the transmitted wave and the reflected wave. A distance from a transmitting end point to a trouble location point is determined in accordance with the difference in time and a signal propagation velocity. Each electric wire (2) in the wire harness (1) is a single wire having no splice portion and a shielded wire having a conductive shield sheath (10). The wire harness (1) is provided with a connection part for connecting each electric wire (2) and the shield sheath (10) to the measuring device (20). <IMAGE>

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CPC (source: EP US)

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Citation (applicant)

JP H0422311 A 19920127 - MATSUSHITA ELECTRIC IND CO LTD

Cited by

EP1436822A4; CN104730419A; EP3614154A1; US11079425B2; US11442095B2; WO2018196926A1; WO0210782A3; WO2016137424A1

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